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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/870,811

05/31/2001

Andrew J.R. Smith

3499-82

1258

56678

7590

06/29/2006

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EXAMINER

BAYARD, DJENANE M

ART UNIT

PAPER NUMBER

2141

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/870,811

Applicant(s)

SMITH ET AL.

Examiner

Djenane M. Bayard

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 9-17, 19-37 and 39-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17, 19-37 and 39-46 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This is in response to amendment filed on 8/23/05 in which claims 1-6, 9-17, 19-37, 39-46 are pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 9, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,513,019 to Lewis in view of U.S. Patent No. 6708166 to Dysart et al further in view of U.S. Patent Application No. 2005/0004978 to Reed et al, further in view of U.S. Patent Application No 2002/0138389 to Martone et al and further in view of U.S. Patent Application No. 2004/0039671 to Smith et al.

- a. As per claim 1, Lewis teaches a method for delivering data objects containing data subject to periodic updates to a plurality of clients via a data communication network, the method comprising the steps of: connecting to at least one input data stream, each input data stream carrying a respective type of data objects (See col. 4, lines 55-59); establishing a

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communication session with at least one client, receiving on a particular input data stream a current state for a specific data object (See col. 8, lines 65-67 and col. 9, lines 1-5).; However, Lewis fails to teach wherein and each object comprising a key which uniquely identifies the respective data object's type; updating an object pool cache to reflect the current state of the specific data object for each respective client subscribed to the particular input data stream and wherein each client having an associated profile comprising data indicating data stream subscriptions and at least one object rule associated with the subscribed data streams and placing a state event in a client event queue and including a client event related to the current state of the specific data object, the client event being derived from at least one state event extracted from the client event queue.;

Dysart et al teaches a method and apparatus for storing data as object, constructing customized data retrieval and data processing requests and performing householding queries. Furthermore, Dysart et al teaches wherein data object header information may include the type and length of various record data fields, the date that each record was created, the key field that identifies each individual record, the record file type and other information about the raw data contained in the data object (See col. 9, lines 6-10).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate and each object comprising a key which uniquely identifies the respective data object's type as taught by Dysart et al in the claimed invention of Lewis in order to identify and describe the data contained in the data portion of the data object (See col. 9, lines 1-5). However, Lewis in view of Dysart et al failed to teach updating an object pool cache to reflect the current state of the specific data object for each respective client subscribed to the

particular input data stream and placing a state event in a client event queue and including a client event related to the current state of the specific data object, the client event being derived from at least one state event extracted from the client event queue.

Reed et al teaches an object-based online transaction infrastructure. Furthermore, Reed et al teaches a version monitoring rule contained in the service object can be triggered. The version monitoring rule compares the service object version value stored in the link element of the calling communications object with the version value of the service object. If the version value in the link element is greater than the version value of the service object, the update method of the service object is executed and the service object is updated prior to completion of the original service object method call (See paragraph [0425]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate updating an object pool cache to reflect the current state of the specific data object for each respective client subscribed to the particular input data stream as taught by Reed et al in the claimed invention of Lewis in view of Dysart et al in order to maintain a current version (See paragraph [0425]). However, Lewis in view of Dysart further in view of Reed et al failed to teach each client having an associated profile comprising data indicating data stream subscriptions and at least one object rule associated with the subscribed data streams and placing a state event in a client event queue and including a client event related to the current state of the specific data object, the client event being derived from at least one state event extracted from the client event queue.

Martone et al teaches a browser interface and network based financial service system. Furthermore, Martone et al teaches an authentication system that also provides access to a user

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entitlement level containing a list of objects according to user entitlement. That is to say, different users are accorded different entitlement levels and as such, access to specific objects resident in system 10. Most preferably, a separate user entitlement level associates a user with specific market data. The authentication system also contains a move/add/change (MAC) function that updates the security function with new or changed user information. The MAC function is a single entry point to fully add or remove a user from all required security or distributed systems that support platform functionality. In addition, the authentication system accesses a user customized preference profile resident on the host server. The user preference profile allows a user to customize his or her browser interface and object settings, such as market data function preferences (See page 3, paragraph [0072-0074]).

It would have been obvious to one with ordinary skill in the art at the time the invention was done to incorporate each client having an associated profile comprising data indicating data stream subscriptions and at least one object rule associated with the subscribed data streams; as taught respectively by Martone et al in the claimed invention of Lewis in view of Dysart et al further in view of Martone et al in order to track information that has been presented to clients (See page 1, paragraph [0012], Martone et al). However, Lewis in view of Dysart further in view of Reed and further in view of Martone et al fails to teach placing a state event in a client event queue and including a client event related to the current state of the specific data object, the client event being derived from at least one state event extracted from the client event queue.

Smith et al teaches placing a state event in a client event queue and including a client event related to the current state of the specific data object, the client event being derived from at least one state event extracted from the client event queue (See page 2, paragraph [0008]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate placing a state event in a client event queue and including a client event related to the current state of the specific data object, the client event being derived from at least one state event extracted from the client event queue as taught by Smith et al in order to provide accurate detection and identification of stale financial information in real time (See page 1, paragraph [0005]).

b. As per claim 2, Lewis teaches wherein the data objects carried on the input data streams comprise differential data objects (See col. 8, lines 49-55).

c. As per claim 3, Lewis teaches after connecting to the at least one data stream, initializing the object pool cache with an initial state of data objects carried on the connected at least one data stream (See Col.8, lines 60-67).

d. As per claim 4, Lewis in view of Dysart et al further in view of Reed and further in view of Martone et al teaches the claimed invention as described above. However, Lewis in view of Dysart et al further in view of Reed fails to teach wherein after a communication session is established with a particular client, delivering to the particular client a snapshot of the data objects in the object pool cache associated with the data stream subscriptions in the profile associated with the particular client.

Martone et al teaches a browser interface and network based financial service system. Furthermore, Martone et al teaches wherein after a communication session is established with a

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particular client, delivering to the particular client a snapshot of the data objects in the object pool cache associated with the data stream subscriptions in the profile associated with the particular client (See page 3, paragraph [0072-0074]).

It would have been obvious to one with ordinary skill in the art at the time the invention was done to incorporate wherein after a communication session is established with a particular client, delivering to the particular client a snapshot of the data objects in the object pool cache associated with the data stream subscriptions in the profile associated with the particular client as taught by Martone et al in the claimed invention Lewis in order to track what information has been presented to clients (See page 1, paragraph [0012]).

e. As per claim 5, Lewis in view of Dysart et al further in view of Reed and further in view of Martone et al teaches the claimed invention as described above. However, Lewis in view of Dysart et al further in view of Reed fails to teach wherein in response to detecting that a particular client in a communication session has subscribed to a new input data stream not in a set of connected input data streams, connecting to the new input data stream.

Martone et al teaches wherein in response to detecting that a particular client in a communication session has subscribed to a new input data stream not in a set of connected input data streams, connecting to the new input data stream (See page 5, paragraph [0096-0097]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate in response to detecting that a particular client in a communication session has subscribed to a new input data stream not in a set of connected input data streams, connecting to the new input data stream as taught by Martone et al in the claimed invention of



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Lewis in order to track what information has been presented to clients (See page 1, paragraph [0012]).

f. As per claim 6, Lewis teaches initializing the object pool cache with an initial state of data objects carried on the new input data stream; and delivering to the particular client a snapshot of the data objects in the object pool cache associated with the new data stream (See col.8, lines 59-67).

g. As per claim 9, Lewis teaches wherein the state events are placed in a specific client event queue dedicated to the respective client to which the client event will be transmitted (See col. 8, lines 60-65).

h. As per claim 15, Lewis teaches wherein the data objects comprise information related to financial product offerings (See col. 4, lines 54-59).

i. As per claim 16, Lewis teaches wherein the input data streams are broadcast by at least one information manager, each information manager maintaining a respective object storage pool; the method further comprising the steps of: retrieving an initial state of data objects carried on the connected at least one data stream from the object storage pool associated with the information manager broadcasting the data stream; and initializing the object pool cache with the retrieved initial states (See col. 8, lines 49-67).

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5. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over 6,513,019 to Lewis in view of in view U.S. Patent No. 6708166 to Dysart et al further in view of U.S. Patent Application No. 2005/0004978 to Reed et al and further in view of U.S. Patent Application No 2002/0138389 to Martone et al and further in view of U.S. Patent No. 2004/0039671 to Smith et al as applied to claim as applied to claim 1 above, and further in view of U.S. Patent No. 6,708, 213 to Bommaiah et al.

a. As per claim 13, Lewis in view Dysart et al further in view of Reed further in view of Martone et al and further in view of Smith et al teaches the claimed invention as described above. However, Lewis Dysart et al further in view of Reed and further in view of Martone et al fails to teach monitoring the performance of communication with each connected client; and dynamically adjusting the rate at which client events are transmitted to the respective clients in response to the monitored performance.

Bommaiah et al teaches a method for streaming multimedia information over public networks. Furthermore, Bommaiah et al teaches monitoring the performance of communication with each connected client; and dynamically adjusting the rate at which client events are transmitted to the respective clients in response to the monitored performance (See col. 3, lines 1-6).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate monitoring the performance of communication with each connected client; and dynamically adjusting the rate at which client events are transmitted to the respective

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clients in response to the monitored performance as taught by Bommaiah et al in order to reduce start-up latency (See col. 3, lines 1-5).

b. As per claim 14, Lewis in view of Dysart et al further in view of Reed further in view of Martone et al and further in view of Smith et al teaches the claimed invention as described above. However, Lewis in view of Dysart et al further in view of Reed and further in view of Martone et al fails to teach wherein the step of monitoring the performance of communication with each connected client comprises determining network transmission time and a client processing time for received client events.

Bommaiah et al teaches a method for streaming multimedia information over public networks. Furthermore, Bommaiah et al the step of monitoring the performance of communication with each connected client comprises determining network transmission time and a client processing time for received client events.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the step of monitoring the performance of communication with each connected client comprises determining network transmission time and a client processing time for received client events as taught by Bommaiah et al in the claimed invention of Lewis in view of Dysart et al further in view of Reed and further in view of Martone et al in order to reduce start-up latency (See col. 3, lines 1-5).

*Allowable Subject Matter*

6. Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17, 19-37, 39-46 are allowed.


### *Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Djenane M. Bayard whose telephone number is (571) 272-3878. The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Djenane Bayard

  
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SUPERVISORY PATENT EXAMINER